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ABSTRACT

Homework is a leading factor for improving academic performance among students who have the ability to work independently and adequate parental support to complete homework assignments. When parents are interested in children's homework, students are more likely to successfully complete their assignments. Teacher support is also necessary to significantly improve student achievement. Parent and teacher training is important in this process. Without training, some parents may be inadequately prepared to effectively equip children with skills to improve their overall academic outcomes. To improve parent involvement, teachers must be trained to design interactive homework (IH) assignments. When designing homework, teachers should consider elements that will facilitate: parent-child interactions, parent-child interest, students' reasoning, and students' self-management/self-directness. Teachers should also ensure that homework is suitable for diverse students and families. Because it is important for teachers to consider parents' and children's interests when designing interactive homework assignments, they should receive recommendations for gathering data regarding family backgrounds and interests using an Interest Inventory Checklist. Teachers must learn how to develop strategies to help students learn new vocabulary across the curriculum and how to formulate developmentally appropriate inference questions or word problems across the curriculum. Finally, training can help teachers learn to provide effective verbal and written directions for completing homework for parents and children. (Contains 24 references.) (SM)

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Parental Involvement and Homework

Homework is reportedly a leading factor for improving academic performance for students who have the ability to work independently and for students who have adequate parental support to complete home learning assignments (Bailey, 2002; Bracey, 1996; Comer & Haynes, 1991; Cooper, Jackson, Nye, & Lindsay, 2001; Epstein, 1988; Henderson & Mapp, 2002; Hoover-Dempsey et al., 2001; Marjoribanks, 1996; McCarthy, 2000; Swick, 1997; Swick, & Graves, 1993). When parents are interested in young children's homework, students are more likely to successfully complete their homework assignments (Cooper et al., 2001). However, it is important to note that teacher support along with parental support is necessary to significantly improve student achievement (Henderson & Mapp, 2002). An examination of the combined effects of teacher support and high parent involvement showed that students' grade point averages (GPAs) are higher if they experience both high teacher support and high parent involvement (2.5 on a 4.0 scale), whereas students who experience high parent involvement and low teacher support earn lower GPAs than their counterparts (0.5 on a 4.0 scale). Those students who experience both low teacher support and low parent involvement also earn lower GPAs (0.6 on a 4.0 scale) (Henderson & Mapp, 2002). These findings suggest that educators should play an active role in the recruitment of meaningful parent involvement.

Parent training can be helpful for assisting young children with homework. Training is important because otherwise, some parents may be inadequately prepared to effectively equip children with skills to improve their overall academic outcomes. Parents who receive proper training to assist their children with home literacy through structured homework, can help their children improve academically (Bailey, 2002; Cooper et al., 2001; Fagella, 1990; Swick & Graves, 1993). To improve parent involvement, it is important to train teachers to design interactive homework (IH) assignments based on the following research.

Components of IH Assignments

Parent-child interactions

One key component of IH assignments is the provision for parent-child interactions. Parents are a crucial part of most children's environments. Piaget (1954/1981) postulated that children learn best when afforded opportunities to interact with their environments. If Piaget is correct, then the

more children interact with their parents while completing school assignments, the more likely they are to experience success.

Interactive homework promotes meaningful conversations between parents and their children pertaining to schoolwork (Epstein, 1994; Cooper et al., 2001). This interaction between family members and students helps promote educational interest and academic achievements.

Parental involvement in homework improves academic performance in that it supports and improves student attitudes related to achievement such as perceptions of personal competence and self-management (Henderson & Mapp, 2002; Hoover-Dempsey et al., 2001; Bryan et al., 2001). The implications for teachers are that designing IH can help improve (a) parental involvement, (b) students' self-concept, and (c) academic achievement.

Parent and student interest as components of IH

Parental interest in homework can facilitate student interest, which is crucial for completing homework assignments that require self-directed and self-management strategies (Cooper et al., 2001). Cooper et al. (2001) found a positive correlation between parental interest in homework and homework completion, whereas only a weak correlation was found between student interest, homework completion and academic achievement. However, it appeared that elementary students' short attention spans, their inability to successfully complete homework because of its difficulty, students' poor study skills, or lack of a supportive home environment was to blame (Cooper et al., 2001). This is important for teachers to understand in order to improve their abilities to design homework that elicits parents' participation and engages students' thinking (Warton, 2001).

Reasoning as a component of IH

Activities that encourage parents and children to reason through tasks are more authentic for dealing with daily problems (DeVries & Kohlberg, 1987). Stager (2001) examined Piaget's philosophy regarding teachers' and children's problem solving. Piaget found that as children reason through their mistakes, they construct understandings to complex concepts. When teachers make provisions for engaging students and parents in meaningful dialogue, students learn to reason through tasks and arrive at solutions to problems (Warton, 2001). This suggests that teachers should design IH assignments to foster students' critical thinking skills and to entice parents to become involved in home learning activities.

Self-management/self-directness as components of IH

Designing homework to increase parent involvement and incorporate goal setting and self-management or self-directedness should be encouraged (Bronstein & Ginsburg, 1993; Olympia, Sheridan, Jensen & Andrews, 1994; Steinberg, Darling, Dornbusch, & Lamborn, 1992). The use of constructivist techniques (techniques that encourage children to construct their own understandings through interactions with their environments, especially with significant adult figures such as parents and teachers) has been recommended for fostering students' abilities to self-manage the completion of their own homework. Constructivist approaches are strongly linked with students' autonomous behaviors in that these approaches appear to foster children's ability to think and acquire new knowledge independently (DeVries & Kohlberg, 1997). Autonomous students are more able to complete homework assignments than students who are not intrinsically motivated and self-directed (Bronstein & Ginsburg, 1993; Steinberg et al., 1992). Autonomous students are also better able to interact with their parents during the completion of IH to draw their own conclusions and construct their own understandings of home learning activities. Teachers are wise to design homework to incorporate constructivist techniques to foster autonomy, goal setting, self-management or self-directedness.

Homework for diverse student populations

Injecting homework into students' homes without regard to their backgrounds can be ineffective, inadvisable, and patronizing (Auerbach, 1995; Henderson & Mapp, 2002; Taylor, 1997). Teachers should assign homework subsequent to teacher-parent collaborations, when the teacher is fully aware of children's and parents' backgrounds and fully regards them (Auerbach, 1995; Fagella, 1990; Taylor, 1997).

In conclusion, when designing homework, teachers should consider elements that will facilitate (a) parent-child interactions, (b) parent-child interest, (c) students' reasoning, and (d) students' self-management/self-directness. Teachers should also ensure that homework is suitable for diverse populations of students and families.

Teacher Training

Teacher training can provide teachers with strategies to help students and parents develop positive dispositions for home learning activities that are intended to increase parental involvement and student academic

outcomes (Bailey, 2002; Epstein & Van Voorhis, 2001). Initial training should last from 3-4 days, with at least 45 hours of follow-up training throughout the following school year. Training sessions can accommodate multiple grade levels, K-3, because strategies are not grade-level specific. Workshops are intended to train teachers how to:

- (1) evaluate parents'/children's interests using "Interest Inventories"
- (2) develop vocabulary lists to involve students in word study across the curriculum
- (3) write clear directions for homework assignments to facilitate productive parent-child dialogue about vocabulary and inference questions or word problems
- (4) encourage parents to use their experiences to tutor students during the completion of homework
- (5) develop developmentally effective inference questions or word problems across the K-3 curriculum
- (6) analyze the quality of students' inference making/problem solving in order to make recommendations for increasing parental involvement and student outcomes.

Because it is important for teachers to consider parents' and children's interests when designing interactive homework assignments (Cooper, et al. 2001; Warton, 2001), teachers should receive recommendations for gathering data regarding family backgrounds and interests using an Interest Inventory Checklist. The checklist can be teacher-made or be copied from teacher resource booklets. The idea is to determine specific interests of the parent and student audience to increase the likelihood that homework will be completed and that parents will be involved. Interest Inventories can also provide pertinent information to assure that homework is suitable for the families in which it is intended.

Workshops should serve to train teachers how to develop strategies that help students learn new vocabulary across the curriculum. Teachers often make the mistake of assigning vocabulary words for reading, spelling, science, social studies, and math separately, which may overwhelm students with the responsibility for "memorizing" the spelling and/or definitions to a myriad of new terms. Creating an integrated vocabulary list of key words can help link content areas and alleviate the pressure of over burdening students with unproductive homework.

Training can also help teachers formulate developmentally appropriate inference questions or word problems across the curriculum. Workshops should train teachers to selectively extract questions already found

within content area teacher manuals. Teachers can look for questions that require students to (a) reason through scenarios, (b) link subject matter to home experiences, (c) justify or explain solutions, and/or (d) create models to apply knowledge. Many curriculum guides provide provocative questions that involve students in similar activities. Trainings should focus on showing teachers how to select and design inference questions or word problems to include in interactive homework assignments.

The workshops can also provide teachers with research evidence that supports parent involvement in homework. Teachers can use this evidence to encourage parental involvement for increasing academic outcomes and students' self-concepts through the effective design of IH.

Finally, teachers can learn to provide effective verbal and written directions for completing homework for parents and children. Teachers often assign homework at the end of the day or as the bell rings without fully explaining homework directions or objectives. Researchers recommend that teachers involve students in discussions related to the objectives and expected outcomes of the assignments. (Bailey, 2002; Bracey, 1996; Comer & Haynes, 1991; Cooper et al., 2001; Epstein, 1988; Henderson & Mapp, 2002; Hoover-Dempsey et al., 2001; Marjoribanks, 1996; McCarthy, 2000; Swick, 1997; Swick & Graves, 1993). Additionally, teachers should write directions and explanations for each assignment in steps so parents and children can interpret how homework is to be completed. Homework should be assigned in a way that gives the family some flexibility. For example, if the teacher gives three assignments for the week, parents/families and children can be given a time frame in which to complete the assignments rather than one specific date to turn in their work. Allowing for flexibility and providing clear directions serve to improve students' self-direction and ability to self-manage their work, and increases the likelihood that homework will be completed.

Recent research seems to indicate that these activities positively impact student academic outcomes, parental involvement and teachers' abilities to design IH assignments (Bailey, 2002; Henderson & Mapp, 2002).

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